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PROGRESS REPORT NUMBER SIX OF THE GADGET PHYSICS DIVISION
OF THE LOS ALAMOS PROJECT
JANUARY 15, 1945

This document contains 62 pages

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LAMS-198

US DOE / LAO - INF
90500007



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REF ID: A5820008700000

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difficult to make measurements with an external detector, and for this material as possible from the internal assembly. It is, of course, used externally. It seems to be important to eliminate as much extraneous that a fairly good prediction could be made when a long counter was and internal fission chamber and external long counters. It was found with extrapolations to the critical mass using external Geiger counters rather pronounced way upon its position. Some experience was also obtained caused asymmetries which made the effect of added material depend in a material was added. Introduction of detecting chambers near the core was encountered due to changing experimental conditions when additional In the course of these critical mass experiments, some difficulty our understanding of the hydride is far from complete. disagreement between experimental and theoretical results indicates that a 5.5 kg of 25 as critical mass when the core was surrounded by Cd. The 6.3; WC predicted 5.1, observed 7.5. A further observation on BeO gave follows: BeO predicted 2.1 kg 25, observed 3.2; U predicted 3.8, observed slightly for the effect of the extraneous material on the assembly are as calculated. The results which for the case of U and WC must be decreased is found that the observed results are considerably higher than those by Group G-1. Criticality has been reached now in BeO, U, and WC and is further assemblies of UH¹⁰ using U and WC tamperers have been made

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